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Gary Paul Noble

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DILLON & YUDELL LLP
8911 N. CAPITAL OF TEXAS HWY.,
SUITE 2110
AUSTIN, TX 78759

EXAMINER

SU, SARAH

ART UNIT

PAPER NUMBER

2431

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/558,942	Applicant(s) NOBLE, GARY PAUL	
	Examiner Sarah Su	Art Unit 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☒ Claim(s) 1-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/30/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Preliminary Amendment, received on 30 November 2005, has been entered into record. In this amendment, claims 1-24 have been amended.
2. Claims 1-24 are presented for examination.

Priority

3. The claim for priority from PCT/EP04/50847 filed on 25 May 2004 is duly noted.
4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

5. The disclosure is objected to because of the following informalities:
 - a. In paragraph 0058, line 1: "wishing to disclosure information" should read –wishing to disclose information–.
6. Appropriate correction is required.

Claim Objections

7. Claims 1-23 are objected to because of the following informalities:
 - a. In claims 1, 9 and 20, line 1: "the disclosure time" lacks antecedent basis and should read –a disclosure time–;
 - b. In claim 1, lines 5-7: "the trusted body providing a digital certificate signed with a private key of the trusted body providing the publisher with the encryption key prior to the specified date and time" is unclear;

Art Unit: 2431

- c. In claims 2-8, line 1: "A method" is unclear if it relates to "A method" (claim 1, line 1) and should read –The method–;
- d. In claim 3, line 2: "a private key" is unclear if it relates to "a private key" (claim 1, line 5);
- e. In claim 4, line 2: "an asymmetrical key pair" is unclear if it relates to "an asymmetrical key pair" (claim 1, line 2);
- f. In claim 4, line 2: "a specified date and time" is unclear if it relates to "a specified date and time" (claim 1, line 3);
- g. In claim 4, line 3: "a publisher" is unclear if it relates to "a publisher" (claim 1, line 2);
- h. In claims 5 and 6, line 2: "a specified date and time" is unclear if it relates to "a specified date and time" (claim 1, line 3);
- i. As to claims 10-19, line 1: "A system" is unclear if it relates to "A system" (claim 9, line 1) and should read –The system–;
- j. As to claim 11, line 2: "the encryption key value" is unclear if it relates to "the encryption key" (claim 9, line 8);
- k. In claim 11, lines 2-3: "the name" lacks antecedent basis and should read –a name–;
- l. In claim 12, line 2: "a private key" is unclear if it relates to "a private key" (claim 9, line 7) and should read –the private key–;
- m. In claim 13, line 2: "a specified date and time" is unclear if it relates to "a specified date and time" (claim 9, line 5);

Art Unit: 2431

- n. In claim 14, lines 2-3: "a specified date and time" is unclear if it relates to "a specified date and time" (claim 9, line 5);
- o. In claim 18, line 1: "an agent" is unclear if it relates to "one or more agents" (claim 17, line 1);
- p. In claim 20, line 1: "a specified date and time" is unclear if it relates to "a specified date and time" (claim 20, lines 3-4);
- q. In claims 21 and 22, line 1: "A method" is unclear if it relates to "A method" (claim 20, line 1) and should read –The method–;
- r. In claim 21, lines 1-2: "a plurality of publishers" is unclear if it relates to "a plurality of publishers" (claim 20, line 12);
- s. In claim 21, line 3: "a specified date and time" is unclear if it relates to "a specified date and time" (claim 20, lines 3-4);
- t. In claim 22, line 2: "public ke y" should read –public key–;
- u. In claim 22, line 2: "recipients" is unclear if it relates to "the recipient" (claim 20, line 8);
- v. In claim 22, line 3: "the corresponding private key" lacks antecedent basis;
- w. In claim 23, line 3: "a computer" is unclear if it relates to "a digital computer" (claim 23, line 2).

Appropriate correction is required.

Drawings

8. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “31” has been used to designate both trusted service and recipients (0066, line 3).

9. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 45 (Figure 4).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

Art Unit: 2431

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claim 20 is rejected under 35 U.S.C. 102(e) as being anticipated by Batten-Carew et al. (US Patent 6,603,857 B1) and Batten-Carew hereinafter.

As to claim 20, Batten-Carew discloses a system and method for controlling release of time sensitive information, the system and method having:

a trusted body generating an asymmetrical key pair for a specified date and time of disclosure with an encryption key and a decryption key (col. 3, lines 39-47);

the trusted body providing the publisher with the encryption key prior to the specified date and time (col. 3, lines 48-49);

the publisher using the encryption key to encrypt data (col. 3, lines 50-51);

the recipient obtaining the encrypted data (col. 3, lines 51-54);

the trusted body making the decryption key available to the recipient at the specified date and time (col. 3, lines 57-61);

wherein the trusted body generates one or more key pairs for a specified date and time, generating a new key pair for each of a plurality of publishers (col. 2, lines 35-37; col. 3, lines 25-28, 35-47).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-7, 9-15, 19, 21, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Batten-Carew in view of Kudo et al. (US 2001/0052071 A1 and Kudo hereinafter).

As to claims 1, 23, and 24, Batten-Carew discloses:

a trusted body generating an asymmetrical key pair for a specified date and time of disclosure with an encryption key and a decryption key (col. 3, lines 39-47);

the publisher using the encryption key to encrypt data (col. 3, lines 50-51);

the recipient obtaining the encrypted data (col. 3, lines 51-54);

the trusted body making the decryption key available to the recipient at the specified date and time (col. 3, lines 57-61).

Batten-Carew fails to specifically disclose:

the trusted body providing a digital certificate signed with a private key of the trusted body providing the publisher with the encryption k prior to the specified date and time.

Art Unit: 2431

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Batten-Carew, as taught by Kudo.

Kudo discloses a system and method for time-dependent decryption, the system and method having:

the trusted body providing a digital certificate signed with a key of the trusted body providing the publisher with the encryption k prior to the specified date and time (0003, lines 4-10; 0061, lines 10-13; 0065, lines 1-5), but does not explicitly disclose where the digital certificate is signed with a private key.

It is well known in the art that signed documents in a public-key cryptography system are signed using a private key, as evidenced by Schneier (page 37, lines 26-30; page 185, lines 38-39; page 186, lines 1-7). Therefore, since Kudo discloses that the digital certificate is signed with a key, it is signed with a private key.

Given the teaching of Kudo, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Batten-Carew with the teachings of Kudo by providing an encryption key through a digital certificate prior to a specified time. Kudo recites motivation by disclosing that providing keys in a time-key certificate guarantees that a time for enabling decryption information is limited (0019, lines 1-6). It is obvious that the teachings of Kudo would have improved the teachings of Batten-Carew by providing an encryption key in a certificate in order to limit the time for enabling decryption information.

As to claim 9, Batten-Carew discloses:

a publisher (i.e. end user) (col. 3, lines 50-52);
a trusted body (i.e. server) (col. 3, lines 35-37);
an asymmetrical key pair for a specified date and time of disclosure
with an encryption key and a decryption key (col. 3, lines 39-47);
means for making the decryption key available at the specified date
and time (col. 3, lines 57-61).

Batten-Carew fails to specifically disclose:

a digital certificate signed with a private key of the trusted body
providing the publisher with the encryption key prior to the specified date
and time.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Batten-Carew, as taught by Kudo.

Kudo discloses:

a digital certificate signed with a key of the trusted body providing
the publisher with the encryption key prior to the specified date and time
(0003, lines 4-10; 0061, lines 10-13; 0065, lines 1-5), but does not explicitly
disclose where the digital certificate is signed with a private key.

It is well known in the art that signed documents in a public-key cryptography system are signed using a private key, as evidenced by Schneier (page 37, lines 26-30; page

Art Unit: 2431

185, lines 38-39; page 186, lines 1-7). Therefore, since Kudo discloses that the digital certificate is signed with a key, it is signed with a private key.

Given the teaching of Kudo, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Batten-Carew with the teachings of Kudo by providing an encryption key using a digital certificate prior to a specified time. Please refer to the motivation recited above with respect to claims 1 and 24 are to why it is obvious to apply the teachings of Kudo to the teachings of Batten-Carew.

As to claim 2, Batten-Carew fails to specifically disclose:

**wherein the publisher verifies the signature on the digital certificate
with the public key of the trusted body.**

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Batten-Carew, as taught by Kudo.

Kudo discloses:

**wherein the publisher verifies the signature on the digital certificate
with the key of the trusted body** (0065, lines 1-5), but does not explicitly

disclose where the digital certificate is verified with a public key.

It is well known in the art that signed documents in a public-key cryptography system are verified using a public key, as evidenced by Schneier (page 37, lines 26-30; page 185, lines 38-39; page 186, lines 1-7). Therefore, since Kudo discloses that the digital certificate is verified with a key, it is verified with a public key.

Art Unit: 2431

Given the teaching of Kudo, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Batten-Carew with the teachings of Kudo by verifying the signature on the certificate. Kudo recites motivation by disclosing that verifying the correct signature allows for the user to trust the decryption condition service provided by the time-key certificate manager (0024, lines 1-5). It is obvious that the teachings of Kudo would have improved the teachings of Batten-Carew by verifying the signature of a digital certificate in order to establish trust with the decryption condition service of the time-key certificate manager.

As to claims 3 and 12, Batten-Carew discloses:

wherein the encryption key is a public key and the decryption key is a private key in a public key infrastructure (col. 3, lines 44-47).

As to claim 4, Batten-Carew discloses:

wherein the trusted body creates an asymmetrical key pair for a specified date and time on demand from a publisher (col. 3, lines 35-40).

As to claim 5, Batten-Carew discloses:

wherein the trusted body generates one key pair for a specified date and time (col. 3, lines 35-40).

Art Unit: 2431

As to claims 6 and 14, Batten-Carew discloses:

wherein there is a plurality of publishers and one or more key pairs for a specified date and time, a different key pair for each of the plurality of publishers for the specified date and time (col. 2, lines 35-37; col. 3, lines 25-28, 35-47).

As to claims 7, 15, and 21, Batten-Carew fails to specifically disclose:

wherein each of the one or more publishers has a password issued by the trusted body for preventing disclosure of the decryption key.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Batten-Carew, as taught by Kudo.

Kudo discloses:

wherein each of the one or more publishers has a password (i.e. name) issued by the trusted body for preventing disclosure of the decryption key (0003, lines 4-10).

Given the teaching of Kudo, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Batten-Carew with the teachings of Kudo by preventing disclosure of the decryption key using a password. Kudo recites motivation by disclosing that each certificate contains the name of the user used to confirm that the certification authority has provided the digital signature for the public encryption key for that user, guaranteeing that no person other than that user can decrypt the encrypted data (0003,

Art Unit: 2431

lines 4-10; 0004, lines 4-5). It is obvious that the teachings of Kudo would have improved the teachings of Batten-Carew by issuing a password to prevent disclosure of the decryption key in order to guarantee that no other user can decrypt the data.

As to claim 10, Batten-Carew discloses:

including one or more recipients with means for obtaining data encrypted with the encryption key from the publisher prior to the specified date and time and means for obtaining the decryption key at or after the specified date and time (col. 3, lines 51-54, 57-61).

As to claim 11, Batten-Carew fails to specifically disclose:

wherein the certificate includes the specified date and time, the encryption key value, and the name of the trusted body.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Batten-Carew, as taught by Kudo.

Kudo discloses:

wherein the certificate includes the specified date and time, the encryption key value, and the name of the trusted body (0003, lines 4-10; 0005, lines 4-7).

Given the teaching of Kudo, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Batten-Carew with the teachings of Kudo by including a specified time,

Art Unit: 2431

encryption key, and trusted body name in the certificate. Kudo recites motivation by disclosing that using a certificate guarantees that no other person can decrypt the data while limiting the time for enabling the decryption (0004, lines 4-5; 0019, lines 1-6). It is obvious that the teachings of Kudo would have improved the teachings of Batten-Carew by including a specified time, encryption key, and trusted body name in the certificate in order to limit who may decrypt the information and when the information may be decrypted.

As to claim 13, Batten-Carew discloses:

wherein there is a single key pair for a specified date and time (col. 3, lines 35-40).

As to claim 19, Batten-Carew discloses:

wherein the trusted body (i.e. server) **is accessible by the publisher** (i.e. end users) **and the recipients via a communication network** (col. 2, lines 35-37; col. 3, lines 50-54).

14. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Batten-Carew as applied to claim 20 above, and in view of Di Crescenzo et al. (US Patent 6,813,358 B1 and Di Crescenzo hereinafter).

As to claim 22, Batten-Carew fails to specifically disclose:

wherein the decryption key is encrypted with a public key and only recipients the corresponding private key can obtain the decryption key.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Batten-Carew, as taught by Di Crescenzo. Di Crescenzo discloses a system and method for timed-release cryptosystems, the system and method having:

wherein the decryption key is encrypted with a public key and only recipients the corresponding private key can obtain the decryption key (col. 2, lines 44-45).

Given the teaching of Di Crescenzo, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Batten-Carew with the teachings of Di Crescenzo by encrypting the decryption key with a public key. Di Crescenzo recites motivation by disclosing that encrypting the decryption key allows a receiver to decrypt the data only after a release time without establishing communication between the sender and the server (col. 2, lines 17-23). It is obvious that the teachings of Di Crescenzo would have improved the teachings of Batten-Carew by encrypting a decryption key with a public key in order to provide the decryption key after a release time without establishing communication between the sender and server.

Art Unit: 2431

15. Claims 8 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Batten-Carew in view of Kudo as applied to claims 1 and 9 above, and further in view of Di Crescenzo.

As to claims 8 and 16, Batten-Carew in view of Kudo fails to specifically disclose:

wherein the decryption key is encrypted with a public key and only recipients with the corresponding private key can obtain the decryption key.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Batten-Carew in view of Kudo, as taught by Di Crescenzo.

Di Crescenzo discloses:

wherein the decryption key is encrypted with a public key and only recipients with the corresponding private key can obtain the decryption key
(col. 2, lines 44-45).

Given the teaching of Di Crescenzo, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Batten-Carew in view of Kudo with the teachings of Di Crescenzo by encrypting the decryption key with a public key. Please refer to the motivation recited above with respect to claim 22 as to why it is obvious to apply the teachings of Di Crescenzo to the teachings of Batten-Carew in view of Kudo

As to claim 17, Batten-Carew in view of Kudo fails to specifically disclose:

wherein the trusted body has one or more agents who act on behalf of the trusted body.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Batten-Carew in view of Kudo, as taught by Di Crescenzo.

Di Crescenzo discloses:

wherein the trusted body has one or more agents who act on behalf of the trusted body (col. 2, lines 48-51; col. 4, lines 47-55).

Given the teaching of Di Crescenzo, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Batten-Carew in view of Kudo with the teachings of Di Crescenzo by using a smart card agent for the trusted body. Di Crescenzo recites motivation by disclosing that senders, receivers, and time servers may include any computer and/or processing device such as desktop computers, portable computers, and/or smart cards in order to provide for timed-release data (col. 4, lines 40-55). It is obvious that the teachings of Di Crescenzo would have improved the teachings of Batten-Carew in view of Kudo by using a smart card as an agent in order to provide for the timed-release of data.

As to claim 18, Batten-Carew in view of Kudo fails to specifically disclose:

wherein an agent for the trusted body is a smart card having an internal clock for providing the decryption key to a recipient.

Art Unit: 2431

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Batten-Carew in view of Kudo, as taught by Di Crescenzo.

Di Crescenzo discloses:

wherein an agent for the trusted body (i.e. server) is a smart card having an internal clock for providing the decryption key to a recipient (i.e. receiver) (col. 2, lines 48-51; col. 4, lines 47-55).

Given the teaching of Di Crescenzo, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Batten-Carew in view of Kudo with the teachings of Di Crescenzo by using a smart card agent for the trusted body. Please refer to the motivation recited above with respect to claim 17 as to why it is obvious to apply the teachings of Di Crescenzo to the teachings of Batten-Carew in view of Kudo.

Prior Art Made of Record

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Graunke et al. (US Patent 5,991,399) discloses a system and method for securely distributing a conditional use private key to a trusted entity on a remote system.

Art Unit: 2431

- b. Mont et al. (US 2003/0198348 A1) discloses a system and method for encrypting/decrypting data.
- c. Peyravian et al. (US Patent 6,742,119 B1) discloses a system and method for time stamping using time delta in key certificate.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Su whose telephone number is (571) 270-3835. The examiner can normally be reached on Monday through Friday 7:30AM-5:00PM EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/558,942
Art Unit: 2431

Page 20

/William R. Korzuch/
Supervisory Patent Examiner, Art Unit 2431

/Sarah Su/
Examiner, Art Unit 2431